

# 400G-QSFP112-500

Optical Transceivers



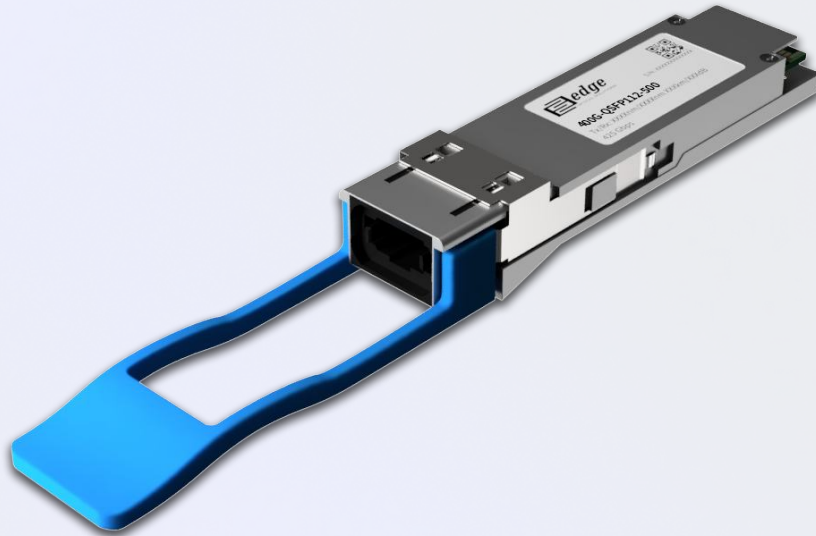
$\lambda = 1310 \text{ nm}$



OS2 Fiber



MTP/MPO-12



OB 3dB



Max 500 m



FEC



$PC \leq 10W$

## Product description

400G-QSFP112-500 is a 400GBASE-DR4 Multi-Vendor MSA Compatible QSFP112 (Quad Small Form-Factor Pluggable 112Gbps per lane) Transceiver designed for operation over Single-Mode Fiber (SMF) optical cable. On the transmission side module converts 4x 100G PAM4 (Pulse-Amplitude Modulation) electrical input channels into 4 parallel and independent Single Lambda 100G PAM4 optical signals. Reversely the opposite is done on the receiving side, module converts 4 parallel and independent Single Lambda 100G PAM4 CWDM optical signals into 4x PAM4 electrical inputs. Module has minimum guaranteed optical budget of 3 dB, which in most cases is enough to reach 500 m distance over OS2 single-mode fiber. 400G-QSFP112-500 uses top quality quad channel DML driver together with 4 parallel DMLs (1310 nm) transmitter and 400Gb/s PIN photodiode array receiver. 400G-QSFP112-500 400GBASE-DR4 supports DDM/DOM optical diagnostics that provide real-time diagnostic information about the present operating conditions. 400G-QSFP112-500 operates in Standard 0°-70°C temperature range and has MTP/MPO-12 interface. 400G-QSFP112-500 400GBASE-DR4 QSFP112 transceiver is CE/RoHS certified and is compliant with product safety standards. 400G-QSFP112-500 is fully compliant to QSFP112 Multi Source Agreement (MSA), 100G Lambda MSA 400G-DR4, QSFP112 MSA, IEEE 802.3ck, IEEE 802.3bs 400 Gbps specification. We will be glad to know your requirements!

## Product Specification:

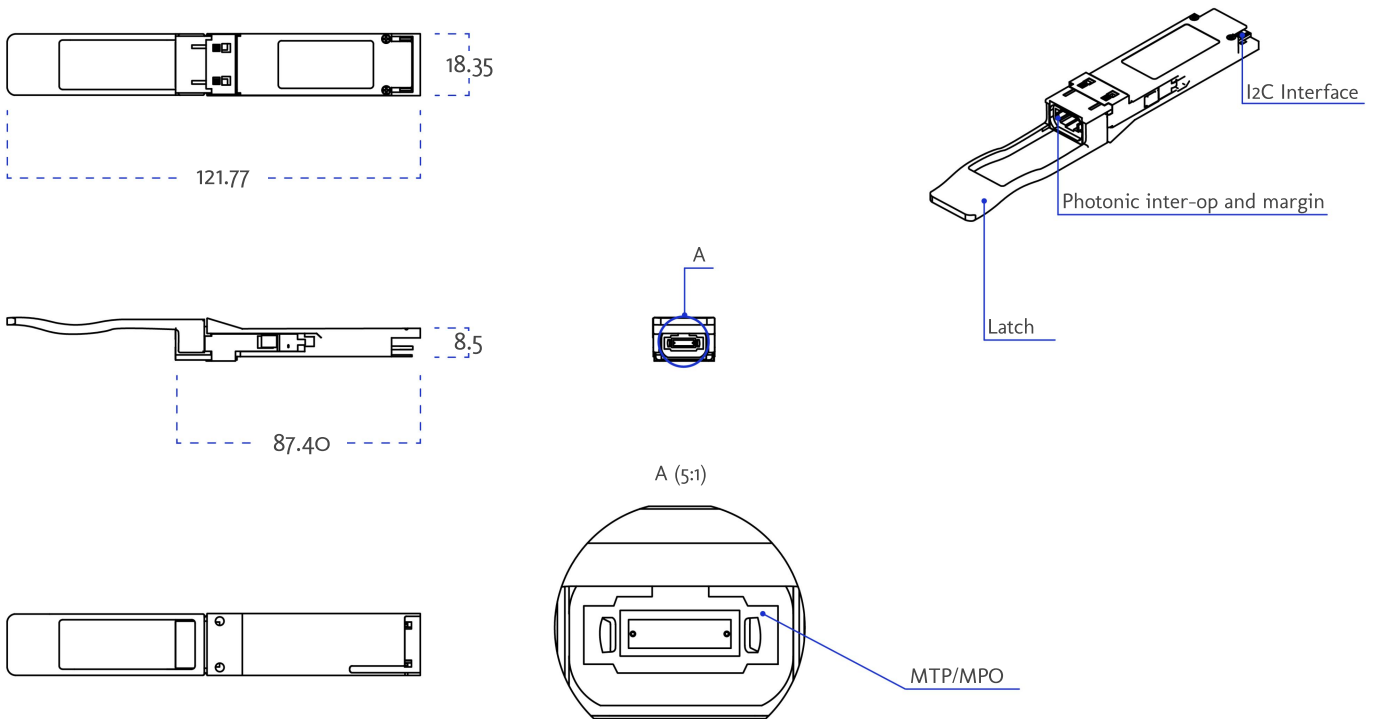
Media Type:	Single-Mode Fiber (SMF)
Connectors:	MTP/MPO-12
TX Wavelength:	1310 nm
RX Wavelength:	1310 nm
Minimum Optical Budget:	3 dB
Maximum Distance:	500m (SMF) with host FEC
Supported Data Rate:	425 Gbps

# Product Specification:

Supported Applications:	400G Ethernet
DDM/DOM:	Supported
Forward Error Correction (FEC):	Host FEC Supported
Transmitter Type:	DML
Tx Wavelength Bandwidth:	13 nm
Average Launch Power (Min) Each Lane:	-2.9 dBm
Average Launch Power (Max) Each Lane:	4 dBm
Extinction Ratio (Min):	3.5 dB
Receiver Type:	PIN
Rx Wavelength Bandwidth:	13 nm
Avg Receiver Sensitivity(Min)Each Lane:	-5.9 dBm
Avg Receiver Sensitivity(Max)Each Lane:	4 dBm
Receiver Overload:	-2.4 dBm
Temperature Range:	Standard 0°-70°C
Storage Temperature:	-40° to 85°C
Relative Humidity:	0 to 85%
Power Consumption:	≤ 10W
Power:	3.3V
Compliance:	QSFP112 MSA V2.0, CMIS 5.0, 100G Lambda MSA, 400GBASE-SR4, IEC60825-1 Laser Safety Compliant, IEEE 802.3bs, RoHS-6, CE"

## Mechanical Dimensions

\*The dimensions are given in millimetres [mm]



## Warranty

EDGE Optic's provides a limited warranty for **sixty (60) months** from Purchaser's receipt of the Equipment represented in this data sheet against defective design or workmanship.



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